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AMENDMENT IN THE SPECIFICATION

PATENT APPLICATION FOR: REFLECTIVE DECORATIVE CANE

INVENTOR: ANNE TROY COUNTRYMAN

FILED DATE: 08/09/01

APPLICATION NO: 09,927,029

(a) TITLE OF THE INVENTION: REFLECTIVE DECORATIVE CANE

(b) CROSS-REFERENCE TO RELATED APPLICATIONS

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U. S. PATENT DOCUMENTS

Patent	Issued	Inventor(s)	Title
US4027687	6/1977	McGowan	Protective and/or Decorative Cover for Walking Aids
US5331988	7/1994	Harmon	Walking Cane with Alternative Cover
US5219402 Daytime and	6/1993	Kondo, Yoshio	Stick Usable at Night
US4236544	12/11980	Osaka, Takeshi	Safety-enhancing Walking Stick
US5197501	3/1993	Ragatz	Multi-purpose Cane
US4625742	12/1986	Phillips	Multi-function Lighted Cane
US4062371	12/1977	Bolen	Walking Cane
US5810466	9/1993	Young	Walking Cane
US6011481	1/2000	Luther, Husain	Walking Cane with Sensor
US5056545	1/1991	Spaeth	Safety Walking Cane

(c) Statement Regarding Federally Sponsored Research and Development-Not Applicable

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(d) Incorporation—By-Reference of Material—Not Applicable

(e) Background of the Invention

(1) Field of the Invention

The field of invention relates to the improved safety-enhancing attractive walking canemade of PETG

(2) Description of Prior Art

Walking paraphernalia of various types have been utilized in prior art, but lacked the attractiveness and safety emphasized in the PETG cane.

Prior art structure may be found in U.S. Pat. Nos.4027687 and 5331988 Each of these inventions use covers added to the cane by the use of Velcro and the other a removable decorative plastic sleeve.

In U.S. Pat. Nos. 5219402, 4236544 the emphasis of each of these inventions focus on safety-enhancing walking stick incorporating a light source produced by batteries, bulbs, and electrical circuits and a translucent section of the cane for the light. U.S. Patents Nos. 5197501, 4625742, 4062371, also depend on electrical circuits to produce light emanating from the cane. None of these canes describe the material of the cane or any new type of cane handle.

The Luther, Husain invention U.S. Pat. No. 6011481 provides help with walking with the use of sensors. U.S. Pat. No. 5056545 uses a light reflector.

There continues a need for a new improved safety walking cane which will appeal to those who need to use a cane, but hate the unattractiveness of many canes and thus do not use a cane leading to unnecessary fall and fractures.

(f) BRIEF SUMMARY OF THE INVENTION

The invention of the PETG Reflective Decorative Cane is an improvement over existing walking canes used by people with physical impairment that require them to have additional support while walking. There are some illuminated canes with batteries that require maintenance and add weight to the cane. There are covers for the cane shafts, but they do not appeal to the aesthetic sense and are not easily available. Some of the unusual canes are not practical but interesting. Acrylic canes are available and beautiful, but they may shatter when dropped and are not practical in cold weather. Other decorative canes are not strong enough for support for the average sized person. The PETG cane is strong, tested for 300 pounds. The invention proposed aims at the impaired who are ashamed to use aluminum or grandpa's wooden cane because they do not want to be seen as "old." They need a walking cane that is attractive and adds to the handicapped or senior citizen's

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wardrobe. The addition of reflective foil and garland to the transparent PETG cane makes this a safety feature as well as a fashion statement. More handicapped and senior citizens will choose to use an attractive cane.

(g) Brief Description of the Drawings:

FIG. 1 is a cutaway view of the PETG cane shaft. Note the measurements for the crook of the cane handle. This crook has been designed to add extra strength to the cane and to provide a spring, a flexibility in walking use. Point A shows the insert of the smaller tube within the larger tube.

FIG. 2 is a cross section of PETG tubing showing the thickness of $5/32$ " and a hollow core diameter $11/16$ ". The drawing shows a wall thickness of the PETG shaft with the added tube covered with glitter foil. When the tube covered with glitter foil is placed in the shaft, there is no transparency, only the glitter. In the garland version of the cane instead of the colored foil tube, a string of reflective garland is inserted into the transparent tube and does not destroy the transparency.

FIG. 3 shows the dimensions of the foil covered tube

FIG. 4 shows the dimensions of the handle end cap.

(h) Detailed Description of the Invention.

The shaft of the PETG cane uses an amorphous copolyester thermoplastic material that will not crystalize. PETG is Polyethylene Terephthalate Glycol Comonomer. The shaft of the cane is transparent for the garland cane.

The walking cane has a tubular shaft, one shaft for the garland cane, or two shafts in the glitter cane. For the garland or one tube cane, the garland is fed through by hand and the tubing for the cane is heated and placed in a mold for bending the cane handle.

The two shafts or glitter cane is prepared in the same way as the garland cane except the decorated holographic rubber adhesive back foil is applied to an inner flexible tube in the production line. The $5/8$ ID "foil tube is inserted into the entire length of the 1" OD tube by machine. The tubing is heated and placed in a mold for bending the cane handle.

The final steps in the production of the PETG cane are to glue the cap on the upper end of the crooked handle and to place a reinforced rubber tip on the end of the shaft.

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